



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,836	07/24/2001	Hiroshi Tanaka	Q65448	4281

7590 03/29/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3202

[REDACTED] EXAMINER

THAI, CUONG T

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/910,836	TANAKA ET AL.	
	Examiner	Art Unit	
	CUONG T THAI	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) None is/are allowed.
- 6) Claim(s) 1-5, 7 and 9-16 is/are rejected.
- 7) Claim(s) 6, 8 and 17 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 July 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

Art Unit: 2173

PART III. DETAILED ACTION

1. Claims 1-17 are presented for examination.
2. The drawings filed on July 24, 2001 have been reviewed and approved.

Specification

3. The disclosure is objected to because of the following informalities:

On page 1 lines 18 and 22; page 2 lines 8, 10, and 19; page 4 line 2; page 5 line 24; page 7 line 21; page 9 lines 13, 19, and 25; page 10 lines 3 and 12; page 11 line 14; page 12 lines 4 and 14; page 18 lines 8 and 22; page 19 line 26; and page 22 line 24 need to be corrected because the spacing between words are required.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 7, 9/5, 9/7, and 10-16 are rejected under 35 U.S.C. 102 (e) as being anticipated by Howards Koritzinsky et al. (USPN: 6,598,011) hereinafter Howards Koritzinsky.

As per claim 1 (system), Howards Koritzinsky discloses "a medical image management system" as the technique of "scanners" in diagnostic systems which Howards Koritzinsky further indicates that the citation "scanners" should be understood to include medical diagnostic data acquisition equipment generally and not to be limited to image data acquisition; as well as picture archiving communications and retrieval systems; and image management systems (see col. 5, lines 25-30), comprising:

" a mobile image data reception device, which is connectable to medical image data storage means installed in a medical facility, having a function of receiving medical image data sets stored in the medical image data storage means from the medical image data storage means and a function of storing the medical image data sets" is taught by Howards Koritzinsky as the technique of a service system 10 which is illustrated for providing remote service to a plurality of medical diagnostic system 12. In Fig.1, the medical diagnostic systems include a magnetic resonance imaging (MRI) system 14, a computed topography (CT) system 16, and an ultrasound imaging system 18. The diagnostic systems may be positioned in a single location or facility, such as a medical facility 20 (see col. 4, lines 30-37), system controllers 46 is linked to a communications modules 48, generally similar to communications module 32 of MRI system 14, for transmitting and receiving data for remote service of system 16 (see col. 5, lines 47-50), and a local storage source at the diagnostic system, as well as from a remote library (see col. 4, lines 15-17);

"an image data storage apparatus, which is connectable to the mobile image data reception device, having a function of receiving the medical image data sets

Art Unit: 2173

transmitting from the mobiles image data reception device and function of storing the image data sets" is taught by Howards Koritzinsky as the technique of In Fig. 1, field service units 24 may be linked to service facility 22 via a remote access network 80...Data may be exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41) and a local storage source at the diagnostic system, as well as from a remote library (see col. 4, lines 15-17);

"the image data storage apparatus comprises storage period management means for managing a storage period of each of the medical image data sets stored therein" is taught by Howards Koritzinsky as the technique Remote Service storage management with Storage Date such as: 07/22/00 and 07/29/00 (see Fig. 10).

This claim is therefore rejected for the reasons as set forth above.

As per claim 5, due to mostly similarity of this claim to that of claim 1, except for a mobile image data reception device connectable to medical image data storage, this claim is therefore rejected for the same reasons applied to claim 1.

As per claim 14, Howards Koritzinsky discloses a medical image management method as the technique of "scanners" in diagnostic systems which Howards Koritzinsky further indicates that the citation "scanners" should be understood to include medical diagnostic data acquisition equipment generally and not to be limited to

Art Unit: 2173

image data acquisition, as well as picture archiving communications and retrieval systems, image management systems (see col. 5, lines 25-30), comprising the steps of:

"storing medical image data sets in storage means installed in a medical facility" is taught by Howards Koritzinsky as the technique of the medical diagnostic systems include a magnetic resonance imaging (MRI) system 14, a computed topography (CT) system 16, and an ultrasound imaging system 18. The diagnostic systems may be positioned in a single location or facility, such as a medical facility 20 (see col. 4, lines 30-37) and the program is stored such as in a database 156 or other storage device accessible to the service facility (see col. 23, lines 65-67);

"receiving and storing the medical image data sets from the medical image storage means by using an image data storage apparatus installed outside the medical facility" is taught by Howards Koritzinsky as the technique in Fig. 1, field service units 24 may be linked to service facility 22 via a remote access network 80... Data may be exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41) and a local storage source at the diagnostic system, as well as from a remote library (see col. 4, lines 15-17);

"managing a storage period of each of the medical image data sets that have been stored" is taught by Howards Koritzinsky as the technique Remote Service storage management with Storage Date such as: 07/22/00 and 07/29/00 (see Fig. 10).

This claim is therefore rejected for the reasons as set forth above.

As per claim 2, the limitation of "wherein the mobile image data reception device further has a function of transmitting a reception completion signal to the medical image data storage means at the time of reception completion of the medical image data sets" is taught by Howards Koritzinsky as the technique of system controllers 46 is linked to a communications modules 48, generally similar to communications module 32 of MRI system 14, for transmitting and receiving data for remote service of system 16 (see col. 5, lines 47-50) and Remote Service storage management with Storage Date such as: 07/22/00 and 07/29/00 (see Fig. 10).

This claim is therefore rejected for the reasons as set forth above.

As per claim 3, due to the similarity of this claim to the first limitation of claim 1, this claim is therefore rejected for the reason set forth above.

As per claim 4, due to the similarity of this claim to the last two limitations of claim 1, this claim is therefore rejected for the reasons as set forth above.

As per claim 7, the limitation of "wherein the medical image data storage means has a function of transmitting a reception request signal for requesting reception of the medical image data sets stored in the medical image data storage means, and the image data storage apparatus has a function of receiving the reception request signal" are taught by Howards Koritzinsky as the technique of as shown in Fig. 2, the field service units 24 and the diagnostic system 12 can be linked to the service facility

Art Unit: 2173

22 via a network connection as illustrated generally at reference numeral 80. Within each diagnostic system 12, a uniform service platform 90 is provided. Platform 90, which is described in greater detail in Fig. 3, includes hardware, firmware, and software components adapted for composing services requests, transmitting and receiving service data (see col. 7, lines 10-18) and in Fig.1, field service units 24 may be linked to service facility 22 via a remote access network 80...Data may be exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41). This claim is therefore rejected for the reason as set forth above.

As per claim 10, the limitation of "wherein the image data apparatus further comprises outputs means for outputting a desired one of the medical image data sets stored therein according to a predetermined output condition input thereto" is taught by Howards Koritzinsky as the technique of field service units 24 may be linked to service facility 22 via a remote access network 80 (see col. 6, lines 34-35) and the control logic indicated generally by reference numeral number 310, may begin in several manners, depending upon whether the report is being generated automatically, or by field engineer... Various types of reports may be produced, including the reports relating to recent or historical service activities, reports of the state of diagnostic system, including the numbers and types of examinations performed, errors or problems encountered, anticipated service needs, and so forth. For example, in X-ray and CT modalities, the reports may related to the operational status of the X-ray tubes, while in the MRI

Art Unit: 2173

systems, reports may include data relating to cryogen levels and temperatures (see col. 19, lines 17-32 and see Fig. 9). This claim is therefore rejected for the reasons as set forth above.

As per claim 15, Howards Koritzinsky discloses "a computer readable recording medium storing a program to cause a computer installed in the mobile image data reception device used in the medical image system" as the technique of within each diagnostic system 12, a uniform service platform 90 is provided. Platform 90, which is described in greater detail in Fig. 3, includes hardware, firmware, and software components adapted for composing services requests, transmitting and receiving service data (see col. 7, lines 10-18) of a service system 10 is illustrated for providing remote service to a plurality of medical diagnostic system 12 (see col. 4, lines 31-32), system controllers 46 is linked to a communications modules 48, generally similar to communications module 32 of MRI system 14, for transmitting and receiving data for remote service of system 16 (see col. 5, lines 47-50), to execute the procedure of:

"receiving the medical image data sets stored in the medical image data storage means installed in the medical facility from the medical storage means and storing the image data sets" is taught by Howards Koritzinsky as the technique of a service system 10 is illustrated for providing remote service to a plurality of medical diagnostic system 12. In Fig. 1, the medical diagnostic systems include a magnetic resonance imaging (MRI) system 14, a computed topography (CT) system 16, and an ultrasound imaging system 18. The diagnostic systems may be positioned in a single location or facility,

Art Unit: 2173

such as a medical facility 20 (see col. 4, lines 30-37), system controllers 46 is linked to a communications modules 48, generally similar to communications module 32 of MRI system 14, for transmitting and receiving data for remote service of system 16 (see col. 5, lines 47-50), and a local storage source at the diagnostic system, as well as from a remote library (see col. 4, lines 15-17);

"transmitting the medical image data sets that have been received and stored to the image data storage apparatus" is taught by Howards Koritzinsky as the technique of field service units 24 may be linked to service facility 22 via a remote access network 80... Data may be exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41) and at step 404, the program is stored such as in a database 156 (see col. 23, lines 65-66).

This claim is therefore rejected for the reason as set forth above.

As per claim 16, Howards Koritzinsky discloses "a computer readable recording medium storing a program to cause a computer in the image data storage apparatus used in the medical image management system" as the technique of field service units 24 may be linked to service facility 22 via a remote access network 80... Data may be exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41), to execute the procedure of:

"receiving the medical image data sets from the medical image data storage means" is taught by Howards Koritzinsky as the technique of field service units 24 may be linked to service facility 22 via a remote access network 80... Data may be

Art Unit: 2173

exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41) wherein system controllers 46 is linked to a communications modules 48, generally similar to communications module 32 of MRI system 14, for transmitting and receiving data for remote service of system 16 (see col. 5, lines 47-50 and see Fig. 1) ;

"managing the storage period of each of the medical image data sets that have been stored" is taught by Howards Koritzinsky as the technique of Remote Service storage management with Storage Date such as: 07/22/00 and 07/29/00 (see Fig. 10).

This claim is therefore rejected for the reasons as set forth above.

As per claims 9/5 and 9/7, the limitation of "wherein the image data storage apparatus has a function of transmitting a storage completion signal to the medical image data storage means at the time of storing the medical image data sets" is taught by Howards Koritzinsky as the technique of field service units 24 may be linked to service facility 22 via a remote access network 80... Data may be exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41) and at step 404, the program is stored such as in a database 156 or other storage device accessible to the service facility (see col. 23, lines 65-67).

This claim is therefore rejected for the reason as set forth above.

Art Unit: 2173

As per claim 11, Howards Koritzinsky discloses the limitation of "the medical image data storage apparatus storing the medical image data sets" as the technique of a local storage source at the diagnostic system, as well as from a remote library (see col. 4, lines 15-17) and the limitation of "enabling transmission of the medical image data sets to the medical data storage apparatus" as the technique of field service units 24 may be linked to service facility 22 via a remote access network 80... Data may be exchanged between the diagnostic systems, field service units, and remote service facility 22 in any suitable format (see col. 6, lines 34-41) and at step 404, the program is stored such as in a database 156 (see col. 23, lines 65-66).

This claim is therefore rejected for the reason as set forth above.

As per claim 12, due to the similarity of this claim to the last two limitation of claim 1, this claim is therefore rejected for the same reasons applied to claim 1.

As per claim 13, due to the similarity of this claim to that of claim 10, this claim is therefore rejected for the same reasons applied to claim 10.

Reason for Allowance

6. Claims 6, 8, 9/6, 9/8 and 17 are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2173

7. The following is an examiner's statement of reasons for allowance:

Examiner carefully considered claims 6 and 8 of the present application. None of the cited arts of record including Ross et al. (USPN: 6,608,628), Banks et al. (USPN: 6,603,494), Howards Koritzinsky et al. (USPN: 6,598,011), Toshimitsu et al. (USPN: 6,434,569), Fuchs (USPN: 6,418,475), Tipirneni (USPN: 6,381,029), Sitka et al. (USPN: 6,349,373), Hiyama et al. (USPN: 6,269,379), Barnsley et al. (USPN: 5,754,704), and Pinsky et al. (USPN: 5,655,084) discloses a medical image management system which includes the image data storage apparatus means for regularly measuring a total amount of the medical image data sets stored in the medical image data storage means, for calculating a difference between a capacity of the medical image data storage means and the total amount of the medical image data sets, and for receiving the image data sets from the medical image data storage means when the difference becomes smaller than a predetermined value (see claim 6) nor a medical image management system includes the image data storage apparatus means regularly measuring a total amount of the medical image data sets stored therein, and calculating a difference between a capacity of the medical image data storage means and the total amount of the medical image data sets stored in the medical storage means, and for transmitting the reception request signal to the image data storage apparatus when the difference becomes smaller than a predetermined value (see claim 8). In particular, Howards Koritzinsky is cited for message report to indicate when the System Disk is Full (see Fig. 9). Barnsley is cited for compressed data representation which is of a size smaller than the predetermined size of the original three dimensional data set (see col. 9, lines 59-63). None of them discloses a

Art Unit: 2173

medical image management system includes the image data storage apparatus means for regularly measuring a total amount of the medical image data sets stored in the medical image data storage means, for calculating a difference between a capacity of the medical image data storage means and the total amount of the medical image data sets, and for receiving the image data sets from the medical image data storage means when the difference becomes smaller than a predetermined value nor suggests a medical image management system includes the image data storage apparatus means regularly measuring a total amount of the medical image data sets stored therein, and calculating a difference between a capacity of the medical image data storage means and the total amount of the medical image data sets stored in the medical storage means, and for transmitting the reception request signal to the image data storage apparatus when the difference becomes smaller than a predetermined value. Claims 9/6, 9/8, and 17 further limit the objected claims 6 and 8, respectively. Therefore, they are also allowed for the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. 1.111(c) to consider these

Art Unit: 2173

references fully when responding to this action. The documents cited therein teach a method and a system for accessing, viewing and linking medical images from user's remote location via an Internet communication structure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG T THAI whose telephone number is (703) 308-7234. The examiner can normally be reached on 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca, can be reached at (703) 308-3116.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 (After Final Communication)

(703) 872-9306 (Official Communication)

(703) 746-7240 (For status inquiries, Draft Communication).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8000.

CUONG T THAI
Examiner
Art Unit 2173

March 18, 2004.



JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application/Control Number: 09/910,836

Art Unit: 2173

Page 15